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ABSTRACT

Education Consolidation and Improvement Act (ECIA) Chapter 2 Formula has provided funding to the Austin (Texas) Independent School District (AISD) in order to expand existing programs and implement new programs, including the addition of staff and the acquisition of materials and equipment that would not otherwise be available from state or local funding sources. Continued funding will allow the District to provide programs that meet the educational needs of at risk students, provide for the acquisition and use of educational materials, provide training for District personnel, provide programs to enhance the personal excellence of students and student achievement, and provide for other innovative projects, such as early childhood education programs. In 1991-92, Chapter 2 Formula funds were allocated for 15 programs, which are described in some detail in this report: (1) Academic Decathlon; (2) Bridge Computer Lab at Read Elementary; (3) Wicat Computer Lab at Blanton Elementary; (4) Writing to Read Computer Lab at Blackshear Elementary; (5) Extracurricular Transportation; (6) Library Resources; (7) Middle School Homeroom Training; (8) Multicultural/Special Purpose Buses; (9) Prekindergarten Supplements; (10) Secondary Library Technology Support; (11) Spanish Academy; (12) Support for Restructured Robbins Secondary School; (13) Technology Learning Center; (14) Private Schools; (15) Administration/management; and (16) Evaluation. The description of each of these programs includes a summary of its effectiveness based on a districtwide employee survey. An executive summary of the report is also provided. (Contains 6 references.) (ALF)

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Chapter 2 Formula
1991-92 Final Report

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Chapter 2 Formula: 1991-92 Final Report

Executive Summary

Austin Independent School District
Department of Management Information
Office of Research and Evaluation

Author: Lauren Hall Moede

Program Description

Chapter 2 Formula provides federal funds to states through the Elementary and Secondary Education Act of 1965 (ESEA) as amended in 1988 by Public Law 100-297. Chapter 2 Formula funds can support one or more programs which:

- Meet the educational needs of students at risk of failure in school or of dropping out, and students for whom providing an education entails higher than average costs;
- Acquire instructional and educational materials;
- Improve schools through innovative programs;
- Enhance the knowledge and skills of educational personnel through training and professional development;
- Enhance student achievement and excellence through instruction and community service; and
- Provide early childhood, gifted and talented, technology education, community education, and/or youth suicide prevention programs.

In 1991-92, the Austin Independent School District (AISD) received $559,245 in Chapter 2 Formula funds, which included $30,261 rolled forward from 1990-91. Funds were allocated to the following programs:

- Academic Decathlon,
- Bridge Computer Lab at Read Elementary,
- Wicat Computer Lab at Blanton Elementary,
- Writing to Read Computer Lab at Blackshear Elementary,
- Extracurricular Transportation,
- Library Resources,
- Middle School Homeroom Training,
- Multicultural/Special Purpose Buses,
- Prekindergarten Supplements,
- Secondary Library Technology Support,
- Spanish Academy,
- Support for Restructured Robbins,
- Technology Learning Center,
- Private schools,
- Administration/management, and
- Evaluation.

Major Findings

- Extracurricular transportation ridership increased, despite a reduction in routes. Half of the students surveyed said they would not have been able to participate in extracurricular activities if the transportation had not been provided (pages 14-15).
- Overall, AISD prekindergarten students showed losses from pre- to posttest on the Bracken Basic Concepts Scale (BBCS). Because of the questionable validity of the BBCS in measuring prekindergarten progress in AISD, scores should be interpreted with caution (pages 23-26).
- Most of the sponsors of trips using Multicultural/Special Purpose buses reported that the trips they took would not have been possible without the provision of these buses (pages 21-22).
- Nearly all participants of the Spanish Academy rated classes highly and indicated that they will continue to enroll in them (pages 30-33).
- No training in the use of the Middle School Homeroom curriculum was held (page 20).
- The majority of high school teachers and administrators surveyed believed that the Academic Decathlon benefited participants and the District and was an effective way to promote academic excellence (pages 3-6).
- Private schools receiving Chapter 2 Formula funds rated highly the effectiveness of the materials and equipment purchased. Staff development was rated moderately effective (pages 27-29).
- Most of the librarians and campus administrators surveyed agreed that the library resources purchased with Chapter 2 Formula funds were useful (pages 16-17).

Budget Implications

Mandate:
External funding agency

Funding Amount:
$559,245 (entitlement of $528,984 and roll forward from 1990-91 of $30,261)

Funding Source:
Federal

Implications:
Chapter 2 Formula has provided funding to AISD to expand existing programs and implement new programs, including the addition of staff and the acquisition of materials and equipment that would not otherwise be available from state or local funding sources. Continued funding will allow the District to provide programs that meet the educational needs of at-risk students, provide for the acquisition and use of educational materials, provide training for District personnel, provide programs to enhance the personal excellence of students and student achievement, and provide for other innovative projects, such as early childhood education programs.

The application for Chapter 2 Formula funds for the 1992-93 school year has been approved by the Texas Education Agency. Total funds budgeted for 1992-93 are $508,655.

A copy of the full report for which this is the Executive Summary is available as Publication Number 91.19 from:
Austin Independent School District
Office of Research and Evaluation
1111 West 6th Street
Austin, Texas 78703
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CHAPTER 2 FORMULA 1991-92 PROGRAM EFFECTIVENESS SUMMARY

CHAPTER 2 COMPONENT	GRADES	NUMBER SERVED	CHAPTER 2 COST (COST PER STUDENT)	COST RATING*	PROGRAM EFFECT. RATING**
Academic Decathlon	11-12	76	$38,609 ($508.01)	$$$	+
Computer Lab at Blackshear Elementary--Writing to Read	K-1	123	$17,191 ($139.76)	$$	+
Computer Lab at Blanton Elementary--Wicat	K-6	402	$16,522 ($41.10)	$$	0
Computer Lab at Read Elementary--Bridge	5-6	264	$15,925 ($60.32)	$$	+
Extracurricular Transportation	6-12	540	$96,418 ($178.55)	$$	+
Library Resources	K-12	66,705	$31,543 ($0.47)	$$	+
Middle School Homeroom Training	6-8	0	0	0	
Multicultural/Special Purpose Buses	PreK-12	9,450	$9,489 ($1.00)	$$	+
Prekindergarten Supplements	PreK	122	$109,786 ($899.89)	$$$	
Private Schools	PreK-12	2,766	$20,875 ($7.55)	$$	+
Secondary Library Technology Support	6-12	12,032	$25,910 ($2.15)	$$	+
Spanish Academy	NA	213 (staff)	$38,774 ($182.04)	$$	+
Support for Restructured Robbins	9-12	361	$6,933 ($19.20)	$$	+
Technology for Access to Problem Solving	8	4,324	NA	$	+
Technology Learning Center at Johnston High	9-12	1,552	$56,838 ($36.62)	$$	0

* **Cost** is the expense over the regular District per-student expenditure. Dollar amounts are per-student-served expenditures, except for programs using Chapter 2 funds for staff; these dollar amounts are allocations.

0	No cost or minimal cost
$	Indirect costs and overhead, but no separate budget
$$	Some direct costs, but under $500 per student
$$$	Major direct costs for teachers, staff, and/or equipment in the range of $500 per student or more

** **Effectiveness** is expressed as contributing to any of the five AISD strategic objectives.

+	Positive, needs to be maintained or expanded
0	Not significant, needs to be improved and modified
–	Negative, needs major modification or replacement
BLANK	Unknown

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CHAPTER 2 FORMULA
1991-92 FINAL REPORT

INTRODUCTION

Chapter 2 Formula provides federal funds to states through the Elementary and Secondary Education Act of 1965 (ESEA) as amended by Public Law 100-297 in 1988. Chapter 2 as amended is intended to contribute to the improvement of elementary (including preschool) and secondary educational programs in both public and private nonprofit schools. According to Public Law 100-297, Chapter 2, Section 1501, the purpose of Chapter 2 programs is to:

1. Provide initial funding to enable state and local educational agencies to implement promising educational programs that can be supported by state and local sources of funding after the programs have been demonstrated effective;

2. Provide a continuing source of innovation, educational improvement, and support for library and instructional materials;

3. Meet the special educational needs of at-risk and high-cost students (as described in the law);

4. Enhance the quality of teaching and learning through initiating and expanding effective schools programs; and

5. Allow the state agency and local educational agencies to meet their educational needs and priorities for targeted assistance.

A school district receiving Chapter 2 Formula funds must use those funds to **supplement** and, to the extent practical, increase the level of funds that would be made available in the absence of Chapter 2 Formula funds. Federal funds may **not** be used to **supplant** local funds. School districts may use Chapter 2 Formula funds to expand existing programs and/or add new programs, including the addition of staff and the acquisition of materials and equipment that would not otherwise be available from state and local funding sources. **In no case, however, may a school district supplant local funds by replacing local funds with Chapter 2 Formula funds.**

States earn Chapter 2 Formula funds based on their school-aged population. States, in turn, allocate at least 80% of these funds to local school districts based on enrollment. Chapter 2 funds can support one or more programs in the targeted assistance areas listed below.

ASSISTANCE AREA	1991-92 AISD PROGRAMS
Programs to meet the educational needs of students at risk of failure in school or of dropping out and students for whom providing an education entails higher than average costs.	• Extracurricular Transportation • Support for Restructured Robbins • Teacher Assistant for the Writing to Read Computer Lab at Blackshear Elementary • Teacher Assistant for the Wicat Computer Lab at Blanton Elementary • Teacher Assistant for the Bridge Computer Lab at Read Elementary • Technology Learning Center
Programs for the acquisition and use of instructional and educational materials, including library books, reference materials, computer software and hardware for instructional use, and other curricular materials that would be used to improve the quality of instruction.	• Library Resources • Secondary Library Technology Support
Innovative programs designed to carry out schoolwide improvements, including the effective schools programs.	• None funded in 1991-92
Programs of training and professional development to enhance the knowledge and skills of educational personnel, including teachers, librarians, school counselors and other pupil services personnel, administrators, and school board members.	• Middle School Homeroom Training • Spanish Academy
Programs designed to enhance personal excellence of students and student achievement, including instruction in ethics, performing and creative arts, humanities, activities in physical fitness and comprehensive health education, and participation in community service projects.	• Academic Decathlon
Other innovative projects which would enhance the educational program and climate of the school, including programs for gifted and talented students, technology education programs, early childhood education programs, community education, and programs for youth suicide prevention.	• Prekindergarten Supplements • Multicultural/Special Purpose Buses

ACADEMIC DECATHLON

The majority of high school teachers and administrators surveyed believed that the Academic Decathlon benefited participants and the District, and was an effective way to promote academic excellence.

DESCRIPTION

The Academic Decathlon is a national scholastic competition designed to challenge the academic abilities of students from all performance levels. The 1991-92 school year marked AISD's fourth year of participation with 76 students from nine high schools involved. Each team consisted of up to nine full-time students from the eleventh and/or twelfth grades of the same high school. A full-time student was defined as a student enrolled in four or more class periods a day. Each team was made up of students of varying academic performance levels, up to three from each of the following categories.

GRADE POINT AVERAGE	COMPETITION LEVEL
3.75-4.00	Honor
3.00-3.74	Scholastic
0.00-2.99	Varsity

Contestants could compete in a higher division than their own grade point average category, but not in a lower category. Students in each category competed only against students in that category.

The competition included 10 events--mathematics, science, economics, language and literature, fine arts, social science, speech, interview, essay, and Super Quiz. All students competed in all events. In each event, gold, silver, and bronze medals were awarded in each competition level. There were also team awards in the Super Quiz and for overall ranking.

For the 1991-92 school year, Chapter 2 Formula allocated $38,609 to the Academic Decathlon for coach stipends, substitutes, reproduction, materials, travel, registration fees, and other program support. This amounted to $508.01 per participant or alternate on the teams.

IMPLEMENTATION

During the 1991-92 school year, nine AISD high schools participated in the Academic Decathlon (all but Travis). Students were recruited for the Academic Decathlon through enrollment in selected elective courses or by nomination of content-area teachers. In four of the participating high schools a speech or humanities elective that incorporated some of the Academic Decathlon material was offered during the fall 1991 semester. (Next year all nine of the participating high schools intend to offer these courses.)

Participation on the part of the students was voluntary, and in order to compete for AISD, team members had to meet all University Inter-Scholastic League (UIL) standards. A full-day practice meet occurred in December 1991. This meet was organized by the AISD instructional coordinator who supervises the Academic Decathlon program in the District.

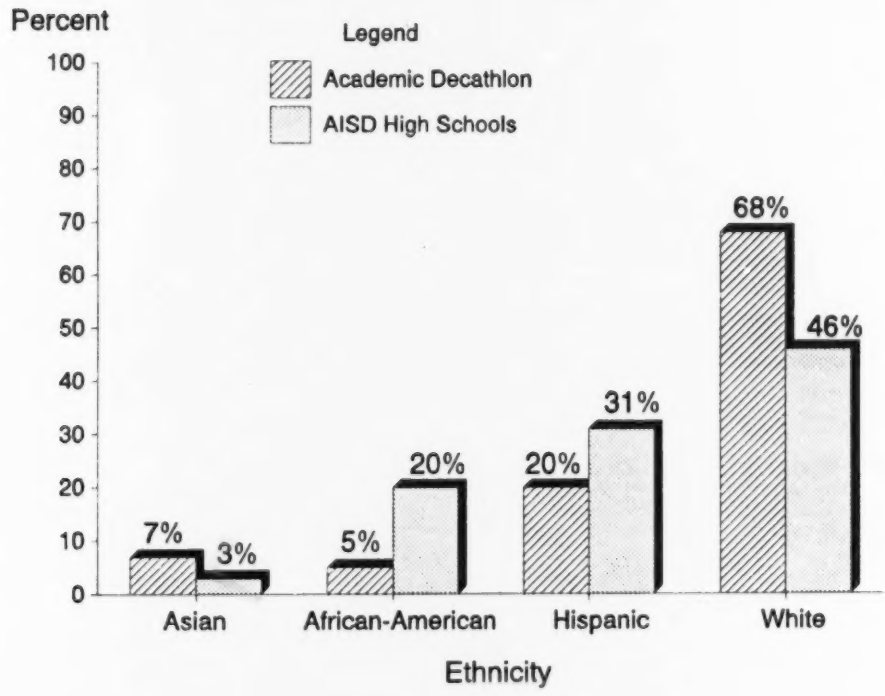
CHARACTERISTICS OF TEAM MEMBERS

In 1991-92, 76 students attended the regional meet in Waco as participants or observers (who may serve as alternates if needed). Of these students:

- 34% were in 11th grade, and 66% were in 12th grade;
- 45% were male, and 55% were female; and
- 7% were Asian, 5% were African-American, 20% were Hispanic, and 68% were White.

As it has been the past three years, African-American and Hispanic students were underrepresented and Asian and White students were overrepresented compared to their respective proportions in AISD's overall high school membership (see Figure 1).

FIGURE 1
ETHNICITY OF 1991-92 ACADEMIC DECATHLON PARTICIPANTS COMPARED TO ALL STUDENTS IN AISD HIGH SCHOOLS



EFFECTIVENESS

The AISD districtwide employee survey included three items concerning the Academic Decathlon. A sample of teachers and administrators in the schools participating in the Academic Decathlon received these questions on effectiveness.

Responses to the items indicated that:

- Over half (52%) of those familiar with the program agreed that AISD benefits from participation in the Academic Decathlon, and about two thirds (62%) agreed that the students benefited from participation.
- Over half (57%) agreed that the Academic Decathlon was an effective way to promote educational excellence.
- Teachers agreed less often than administrators on these items. The difference was greatest regarding the Academic Decathlon's benefit to AISD, with 49% of the teachers agreeing versus 82% of the administrators agreeing.

The results to all three survey items are presented in Figure 2.

FIGURE 2
ACADEMIC DECATHLON 1991-92 SURVEY ITEMS ON EFFECTIVENESS
TEACHER AND ADMINISTRATOR RESPONSES

SURVEY ITEM*	GROUP	N	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
The District benefits from our participation in the Academic Decathlon.	Teachers	196	16%	33%	35%	11%	5%
	Admin.**	23	43%	39%	9%	0%	9%
	TOTAL	219	19%	33%	32%	10%	5%
Students benefit from participation in the Academic Decathlon.	Teachers	220	22%	38%	34%	4%	3%
	Admin.**	23	52%	30%	9%	4%	4%
	TOTAL	243	25%	37%	31%	4%	3%
The Academic Decathlon is an effective way to promote academic excellence.	Teachers	207	20%	36%	28%	14%	3%
	Admin.**	19	58%	16%	11%	11%	5%
	TOTAL	226	23%	34%	26%	13%	3%

*Results include only those from respondents who were familiar with the program (i.e., the responses of those who chose the "unfamiliar with program" response were excluded from the percentages reported).

**Admin. = administrators

TEAM RANKINGS

Austin ISD teams ranked from fifth to twenty-third place in the team rankings of the 23 teams participating in the regional meet. (The team that placed twenty-third had only two of the original nine-member team compete.) Of the nine AISD teams that participated in the Academic Decathlon in both 1990-91 and 1991-92, three teams improved their ranking by one to nine places, four teams dropped from one to four places, and two teams maintained the same team ranking.

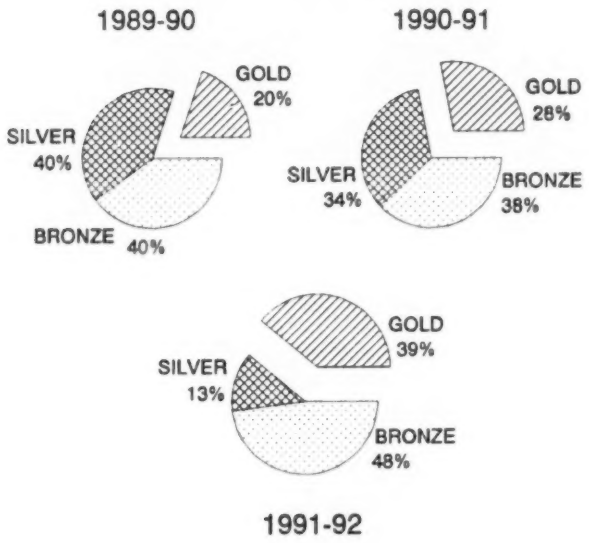
MEDALS WON

Effectiveness was not measured by medals earned for two reasons: each participant was simply asked to do his or her best, and participation has other benefits in addition to medals. However, examining individual medals provides interesting information. AISD students represented 36% of the participating Academic Decathletes in Region V and won 46 (33%) of the 140 medals awarded. These medals included 18 gold, 6 silver, and 22 bronze, and were won by 30 AISD students, who were awarded from one to four medals each. By comparison, during the 1989-90 year, AISD students represented about 36% of the students participating, while earning 20% of the individual medals. During the 1990-91 year, AISD students represented 43% of the students participating and earned 37% of the individual medals (see comparison below).

	1989-90	1990-91	1991-92
Percent of Decathletes	36	43	36
Percent of Medals	20	37	33

While the percent of medals earned declined in 1991-92, the percent of medals that were gold increased (see Figure 3).

FIGURE 3
COMPARISON OF MEDALS WON BY AISD ACADEMIC DECATHLETES
1989-90 THROUGH 1991-92



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ELEMENTARY COMPUTER LABS

For the 1991-92 school year, Chapter 2 Formula allocated funds to three elementary schools to provide full-time teacher assistants for instructional computer labs. The labs included the Writing to Read computer lab at Blackshear Elementary, the Wicat computer lab at Blanton Elementary, and the Bridge computer lab at Read Elementary.

Writing to Read Computer Lab at Blackshear Elementary

Most (87%) of the staff at Blackshear agreed that the Writing to Read lab is an effective way of developing the writing and reading skills of kindergarten and first-grade students.

DESCRIPTION OF THE LAB

The Blackshear computer lab used the Writing to Read (WTR) curriculum, which was designed to develop the writing and reading skills of kindergarten and first-grade students. The program seeks to teach students to:

- Use the alphabetic principle which allows them to write anything they can say;
- Use a consistent phonemic spelling system;
- Use the computer, which acts as a guide and a tutor;
- Develop their ability to express their ideas and manipulate the English language; and
- Use a typewriter.

The WTR lab at Blackshear consisted of eight computers, which were used at two of the stations in the lab: the computer station (where students do word activities), and the typing station (where students type words and sentences). The other stations are the work journal station, where students listen to activities and follow along in a workbook, and the listener library. Students spent 15 minutes at each station. Each student had a folder that was used at all of the stations. Students worked in pairs at the computer stations.

STUDENTS SERVED

Students in kindergarten classes (N = 62), first-grade classes (N = 55), and one special education class (emotionally disturbed (ED) students in grades 1-3; N = 6) were served in the Writing to Read lab. A total of 123 students was served.

Chapter 2 Formula funds were used to pay the salary of a full-time teacher assistant to run the lab. Based on the Chapter 2 allocation of $17, 191, the cost per student served was $139.76.

LAB FUNCTIONING

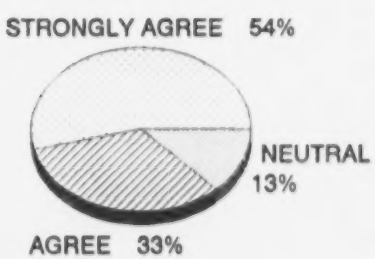
Service in the lab was provided to students starting in September 1991, after a four-week orientation to the computers. During the fall 1991 semester, first-grade and ED students used the Writing to Read program, and kindergarten students used the Bouncing Bee program (a software program that develops letter recognition). Kindergarten students started using the Writing to Read program during the spring 1992 semester. Kindergarten students went to the lab for one hour every day. First-grade students went to the lab for 45 minutes every day. Special education students went to the lab every other day. Classes went to the lab one at a time, accompanied by their teachers.

LAB EFFECTIVENESS

Districtwide Employee Survey

Using the districtwide employee survey, a sample of teachers and administrators (N = 24) at Blackshear was asked a question concerning the effectiveness of the Writing to Read lab. Blackshear staff believed that the Writing to Read lab was an effective way of developing the writing and reading skills of kindergarten and first-grade students (see Figure 4).

FIGURE 4
STAFF RESPONSES (N = 24) TO SURVEY ITEM: "THE WRITING TO READ LAB IS AN EFFECTIVE WAY OF DEVELOPING THE WRITING AND READING SKILLS OF KINDERGARTNERS AND FIRST GRADERS."



Test Scores

Effectiveness of the Writing to Read lab cannot be measured using test scores because the students served in the lab (kindergarten, first-grade, and special education students) did not have pre- and posttest scores. In AISD, students in kindergarten are not tested; therefore, there are no scores for 1991-92 kindergartners and no pretest (spring 1991) scores for students in the first grade during 1991-92. Special education students whose Admission, Review, and Dismissal (ARD) committee determined that they should be exempted from all or part of the ITBS or NAPT have no scores. Scores for special education students who took the test for experience only were not included in the achievement summaries.

Wicat Computer Lab at Blanton Elementary

In grades 2 through 5, students at Blanton achieved predicted gains on the Iowa Tests of Basic Skills (ITBS) and the Norm-Referenced Assessment Program for Texas (NAPT) in eight of 10 comparisons and were below predicted gains in two comparisons.

DESCRIPTION OF THE LAB

The Wicat computer lab provided supplemental instruction in reading, language arts, writing, mathematics, and typing. Software covered a full range of skills in each area. The Wicat software ran on the 30 Wicat computer terminals in the lab.

STUDENTS SERVED

Almost all Blanton students used the Wicat lab. All students in grades 1-5 and some sixth-grade students were served daily. First-grade students were served 20 minutes per day, and second- through fifth-grade students were served 30 minutes per day. Kindergarten students were served twice a week for 20 minutes for a few weeks in the spring 1992 semester. AIM High (gifted and talented) students in grades 2-5 came for an additional 30 minutes per day. Sixth-grade AIM High students were served 30 minutes per day. Thus, the only students who did not use the Wicat lab were sixth graders not in AIM High and prekindergarten students.

Chapter 2 Formula funds were used to pay the salary of a full-time teacher assistant to run the lab. Based on the Chapter 2 Formula allocation of $16,522, the cost per student served (a total of 402 students) was $41.10.

LAB FUNCTIONING

The lab was set up on a two-week schedule. During the first week of each cycle, students did three reading activities and two mathematics activities. During the second week of the cycle, students did two reading activities and three mathematics activities. Fourth-grade students completed a typing activity once a week, and fifth-grade students completed a writing exercise once a week.

LAB EFFECTIVENESS

Districtwide Employee Survey

Using the districtwide employee survey, a sample of teachers and administrators at Blanton was asked a question concerning the effectiveness of the Wicat computer lab. When asked if the lab was an effective way of developing reading and mathematics skills, 41% of the teachers and administrators strongly agreed, 33% agreed, 15% were neutral, and 11% disagreed (N = 27). When asked if the lessons in the Wicat lab were well coordinated with those being studied in the classroom, over half (55%) of the teachers surveyed (N = 22) agreed. The other teachers responding strongly agreed (18%), were neutral (23%), or disagreed (5%).

Test Scores

Second-grade students' gains on the **I**owa **T**ests of **B**asic **S**kills (ITBS) and third- through sixth-grade students' gains on the **N**orm-Referenced **A**ssessment **P**rogram for **T**exas (NAPT) between spring 1991 and spring 1992 were examined using ROSE, the **R**eport on **S**chool **E**ffectiveness. ROSE is a series of statistical analyses that answer the question, "How do the achievement gains of a school's students compare with those of other AISD students of the same previous achievement levels and background characteristics?" For each student in the group, a predicted score is produced that is based upon the following criteria:

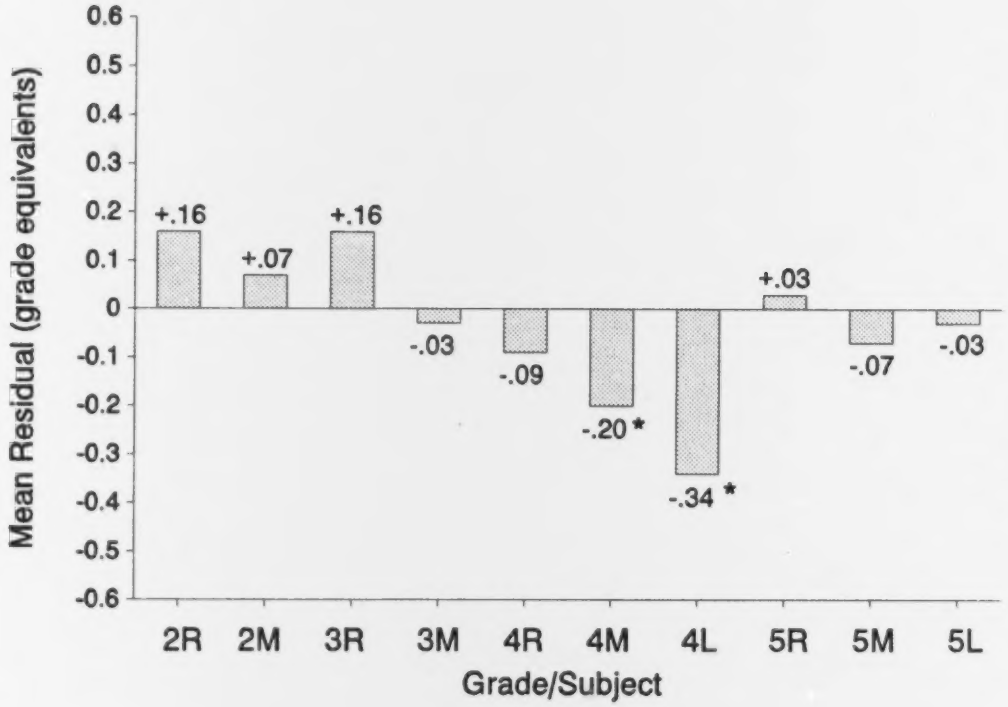
- Previous achievement level,
- Sex,
- Ethnicity,
- Age,
- Low income indicator,
- Family income indicator,
- Desegregation status of the school,
- Transfer status of the student, and
- Pupil teacher ratio for school and grade.

The predicted scores are then compared with the students' actual scores. The difference between these two scores is called the ROSE residual score. These residual scores are averaged for a particular school to produce the ROSE scores, which are on a grade equivalent score scale. So, for example, if a school had a ROSE score of +.20 it would mean that the students at that school scored two months higher, on the average, than students districtwide with similar characteristics. If the ROSE score is far enough above or below zero to achieve statistical significance ($p < .05$), scores are in the "exceeded predicted gain" or "below predicted gain" categories. If not, scores are in the "achieved predicted gain" category.

Only scores for grades 2 through 6 were examined because the ROSE is not available for kindergarten and first grade. No language scores are reported for second and third graders because second graders take spelling as the language test, so there are no pretest language scores for third graders.

The results showed that second-, third-, and fifth-grade students achieved the predicted gains in both reading and mathematics. Fourth-grade students achieved the predicted gain in reading, but fell below in mathematics. In language, fifth-grade students achieved the predicted gains, while fourth graders fell below the predicted gains. In grade 6, only AIM High students were served by the Wicat lab, but there were not enough students to determine significance of gains. Figure 5 illustrates these results.

FIGURE 5
BLANTON ROSE RESULTS, 1991-92



LEGEND:

* = subjects in which student achievement was significantly below the predicted level
R = READING
M = MATHEMATICS
L = LANGUAGE

CONCLUSION

In grades 2 through 5, students at Blanton achieved predicted gains on the ITBS and the NAPT in eight of 10 comparisons. In two comparisons, students achieved below the predicted level. Students did not achieve above the predicted level in any grade or subject area.

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Bridge Computer Lab at Read Elementary

Most (83%) of the Read staff surveyed agreed that the Bridge computer lab was effective in accelerating learning in mathematics, especially for students below grade level. Low-achieving fifth-grade students targeted for additional help in mathematics achieved predicted gains on the Norm-Referenced Assessment Program for Texas (NAPT) in mathematics.

DESCRIPTION OF THE LAB

The Bridge computer lab at Read Elementary (grades 5-6) focused on mathematics. The goals of the program were to raise the test scores of students with TAAS nonmastery in mathematics, promote computer skills, and reinforce mathematics concepts and basic skills. While all students utilized the lab, fifth-grade students scoring below the 30th percentile in either Mathematics Concepts or Mathematics Total on the spring 1991 ITBS were targeted for additional help in the lab. Additional students were added based on teacher recommendations and TAAS nonmastery. ITBS and TAAS results were examined to identify specific skills with which students needed assistance. These low-achieving students visited the lab during their tutorial time.

The Bridge lab utilized SVE (Society for Visual Education) software and MECC (Minnesota Educational Computer Consortium) software. The lab contained seven Apple IIGS computers purchased with Chapter 2 funds and 10 Apple IIE computers purchased with local funds.

Chapter 2 Formula funds were used to pay the salary of a full-time teacher assistant to run the lab. Based on the Chapter 2 Formula allocation of $15,925, the cost per student served was $60.32.

STUDENTS SERVED

Overall, 264 students were served during the 1991-92 school year. The targeted group included 66 students. Targeted students were served 85 minutes per week; other students were served 45 minutes per week. Students in the fifth grade went to the lab once a week for 45 minutes of mathematics activities and once a week for 45 minutes of social studies or science enrichment (subject alternated weekly). Students in the sixth grade went to the lab once a week to reinforce mathematics skills.

Of the 66 targeted students:

- 11% were African-American, 15% were Hispanic, and 74% were Other;
- 55% were male, and 45% were female; and
- 21% were from low-income families.

LAB FUNCTIONING

Service in the lab was provided to students beginning the first day of school. Students in the targeted group were not served until the second week of school because it took that amount of time to select the students and schedule their lab sessions.

Appropriate software was selected by the teacher assistant after consulting the classroom teacher. Mathematics and science activities were selected to correspond with skills being studied in the classroom. Social studies activities were usually mapping or atlas activities. Other subject areas taught in the lab included writing (Magic Slate software) and typing (Type to Learn software).

The classroom teachers at Read accompanied their classes to the computer lab where they monitored student activity and provided one-on-one tutoring as needed.

LAB EFFECTIVENESS

Districtwide Employee Survey

Using the districtwide employee survey, a sample of teachers (N = 14) at Read was asked a question concerning the effectiveness of the Bridge lab. When asked if the computer lab had been effective in accelerating learning in mathematics, especially for students below grade level, half (50%) strongly agreed, a third (33%) agreed, one (8%) was neutral, and one (8%) disagreed.

Test Scores

The Report on Program Effectiveness (ROPE), like the ROSE, uses regression analyses to compare obtained achievement gains on the Norm-Referenced Assessment Program for Texas (NAPT) with gains predicted for students with similar characteristics districtwide. Figure 6 shows the ROPE results for the targeted fifth-grade students who received additional help in mathematics in the Bridge computer lab, and who had valid test scores for 1991 and 1992. **The results showed that these students achieved the predicted gains in mathematics.**

FIGURE 6
READ ROPE RESULTS FOR TARGETED STUDENTS, 1991-92

GRADE	N	PRETEST	POSTTEST	GAIN	SIGNIFICANCE*
5	32	4.6	5.5	0.8	at predicted level

*Significance: indicated whether gains were at, above, or below predicted levels based on regression analysis (Report on Program Effectiveness).

EXTRACURRICULAR TRANSPORTATION

The use of extracurricular transportation increased during the 1991-92 school year. Although some routes were canceled during the spring 1992 semester and the total number of trips during the year was thereby decreased, ridership increased.

A third of the reassigned high school students surveyed reported riding an extracurricular bus at least once a week. This is up from the 25% of students who reported doing so in 1990-91. Half of the students surveyed said that they would not have been able to participate in extracurricular activities if the transportation had not been provided, up from one third of the students who reported this in the 1990-91 student survey.

UTILIZATION OF FUNDS

Chapter 2 Formula allocated $96,418 to provide extra bus routes for secondary students who have been reassigned under AISD's desegregation plan. By providing transportation after school, these students had an equal opportunity to participate in such extracurricular activities as athletics, band, cheerleading, drama, drill team, tutoring, and other school club activities. Transportation to zero hour activities before school was no longer provided.

STUDENTS SERVED AND COSTS

A total of 34 bus routes were scheduled to serve 18 secondary campuses in 1991-92. Of these bus routes:

- 17 routes served middle school/junior high school campuses Monday through Friday,
- 5 routes served middle school/junior high school campuses twice weekly,
- 10 routes served high school campuses Monday through Friday, and
- 2 routes served one high school campus Monday through Thursday.

The number of routes decreased in January 1992, when the two Monday through Thursday routes at Johnston were canceled. In April 1992, eight of the Monday through Friday routes serving middle school/junior high schools were canceled. During the course of the 1992-93 school year a total of 4,963 extracurricular transportation trips were run, down from 5,670 trips in 1990-91.

An average of 16 students rode each bus, with actual ridership ranging from 4 to 45 students per bus. The number of students served on all routes originally scheduled was 540.

After subtracting the routes canceled during the year, a total of 4,963 trips served 79,092 students during the 1991-92 school year, up from 68,040 students served in 1990-91. The cost for providing this service in 1991-92 is shown in Figure 7.

FIGURE 7
COSTS OF PROVIDING EXTRACURRICULAR TRANSPORTATION IN AISD IN 1991-92

COSTS	CHAPTER 2 FORMULA	AISD	TOTAL
Cost (% of total cost)	$96,418 (49.5%)	$98,295 (50.5%)	$194,713
Cost Per Trip	$19.43	$19.80	$39.23
Cost Per Student Per Trip	$1.22	$1.24	$2.46

The Chapter 2 Formula cost per student per trip was less than in 1990-91 ($1.45), although the percentage of the total cost contributed by Chapter 2 Formula increased from 42% in 1990-91 to 49.5% in 1991-92. The overall cost of this service decreased from $235,004 in 1990-91 to $194,713 in 1991-92.

EFFECTIVENESS

High School Student Survey

A random sample of reassigned high school students responded to questions regarding the use of extracurricular transportation on the student survey administered in the fall of 1991. Responses indicate that:

- One third (33%) of the students had ridden an extracurricular bus at least once during the school year (N=441). This is a slight increase over last year, when 29% of the students had ridden a bus at least once, but less than the 48% in 1989-90 or the 62% in 1988-89.
- Over two thirds (69%) of the students surveyed did not ride the bus at all during an average week (N=442). In 1990-91, three quarters (76%) did not ride the bus, indicating an increase in the number of students who do ride the bus at some time during an average week.
- Half (50%) of the students (N=442) would not have been able to participate in extracurricular activities if transportation had not been provided, up from 33% in 1990-91.

Districtwide Staff Survey

A random sample of AISD secondary teachers, professionals, and administrators responded to two questions addressing the effectiveness of extracurricular transportation in the 1992 districtwide staff survey. Responses indicate that:

- Most (78% of 243) of the staff agreed that the provision of extracurricular buses made it easier for reassigned students to participate in extracurricular activities; 16% were neutral, and 6% disagreed.
- Over half (62% of 255) reported that because of this service, 41 or more students were able to participate in extracurricular activities who could not otherwise; of these, 30% reported that more than 90 students at their campus benefited. A small percentage (7%) indicated that no students were helped by the extracurricular transportation.

LIBRARY RESOURCES

Most (83%) of the librarians and administrators surveyed agreed that the library resources purchased with Chapter 2 Formula funds were useful, and the majority (54%) reported that the resources were allocated to the library.

UTILIZATION

Chapter 2 Formula allocated $32,310 for the purchase of library resources for elementary and secondary campuses. Elementary schools were allocated from $250 to $360 dollars each, with the amount based on recommendations from the Assistant Superintendent for Elementary Education and the Director of Elementary School Curriculum. Middle school/junior high campuses were allocated $500 each and senior high campuses were allocated $500 each. Robbins Secondary School and the Alternative Learning Center were allocated $250 each. Expenditures per grade level and cost per student are presented in Figure 8.

FIGURE 8
CHAPTER 2 FORMULA EXPENDITURES FOR LIBRARY RESOURCES, 1991-92

GRADE LEVEL (ENROLLMENT)	# SCHOOLS PARTICIPATING	EXPENDITURES	COST PER STUDENT
Elementary (38,314)	65	$19,395	$0.51
Middle/Jr. High (13,298)	13	$6,462	$0.49
High School (15,093)	12	$5,686	$0.38
TOTAL (66,705)	**90**	**$31,543**	**$0.47**

Elementary schools received a total allocation of $20,310. Materials ordered included:

- Books,
- Dictionaries,
- Thesauruses,
- Almanacs,
- Globes,
- Maps and atlases,
- Library reference software,
- Video cassettes,
- Filmstrips, and
- Card kits to catalogue materials purchased.

Secondary schools received a total allocation of $12,000. Materials ordered by middle and junior high schools included:

- Books,
- Dictionaries,
- Maps,
- Art prints,
- Video cassettes,
- Filmstrips, and
- Audio cassettes.

High schools ordered the following:

- Books,
- Dictionaries,
- Thesauruses,
- Video cassettes,
- Audio cassettes, and
- Microfiche.

All materials purchased with Chapter 2 Formula funds were to be catalogued and circulated from the library.

EFFECTIVENESS

The AISD districtwide employee survey included two items concerning library resources.

- Most (83%) of the librarians (N = 40) and administrators (N = 135) familiar with the program agreed that the library resources purchased with Chapter 2 Formula funds were useful. Very few (3%) disagreed that the resources were useful. However, a fifth (20%) of the administrators surveyed (N = 169) were unfamiliar with the program.

- Of the librarians surveyed (N = 39), 23% reported that the resources purchased were allocated to classrooms, 54% reported that the resources were allocated to the library, and 23% reported that materials were allocated to both classrooms and the library.

SECONDARY LIBRARY TECHNOLOGY SUPPORT

Chapter 2 Formula funds were used to purchase Compact Disc Read Only Memory (CD ROM) players for 10 secondary schools. Funds were also used to purchase databases, CD ROM discs, and microcomputers used to run the CD ROM players.

UTILIZATION

During the 1990-91 school year, Chapter 2 Formula provided funds for technology education which were used to purchase equipment and databases for selected secondary school libraries. Seven high schools and eight middle school libraries were selected to receive materials. These schools ordered Compact Disc Read Only Memory players and CD ROM databases. The storage capacity of the compact discs is immense, but the information stored on CD ROM discs cannot be changed. Therefore, they are useful to libraries as databases containing encyclopedias, dictionaries, directories, and indices.

Chapter 2 Formula allocated $26,280 for secondary library technology support for the 1991-92 school year. Purchases included CD ROM players for the 10 secondary schools, microcomputers for eight secondary schools needing them to run a CD ROM player, a monitor for the middle school library that had a computer without a monitor, and databases or CD ROM discs for 11 secondary schools. The allocation also included funds for library resources for Bowie High School. The schools receiving items purchased with Chapter 2 Formula funds are presented in Figure 9.

The CD ROM players, CD ROM discs, and microcomputers and monitor were ordered in March 1992 and were received in the AISD Library Media Center in late May 1992. The equipment will be installed in the schools in August 1992, before the beginning of the 1992-93 school year.

DESCRIPTION OF PURCHASES

The CD ROM discs purchased included the following topics:

- World Atlas,
- United States History/United States Atlas,
- Time Table of History,
- Illustrated Encyclopedia,
- Time Magazine Compact Almanac,
- Reference Library,
- Mammals,
- Magazine Rack,
- Food Analyst,
- ROMSOFT PD Disc,
- The Classic Collection, and
- Game Pack.

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The databases ordered by AISD secondary schools included the following:

- Compton's Multimedia Encyclopedia (ordered for Mendez Middle School),
- Reader's Guide to Periodical Literature (ordered for McCallum High School), and
- Reader's Guide Abstracts (ordered for Bowie High School).

Allocations for this component also included funds for library resources for the Bowie High School library. Purchases included books and one set of each of the following: the Family Health Encyclopedia, the Encyclopedia of Career and Vocational Guidance, the Academic American Encyclopedia, and the World Book Encyclopedia.

Chapter 2 Formula funds were also used to purchase a color monitor for the microcomputer in the Bedichek Middle School library.

FIGURE 9
SECONDARY LIBRARY TECHNOLOGY SUPPORT PURCHASES
CHAPTER 2 FORMULA, 1991-92

SCHOOL	1991-92 ENROLLMENT	MATERIALS PURCHASED		
		CD ROM PLAYER	MICROCOMPUTER	DATA BASE OR CD ROM DISCS
Bedichek Middle School	1,110	✓	✓	✓
Covington Middle School	1,511	✓	✓	✓
Dobie Middle School	1,042	✓	✓	✓
Kealing Junior High	907	✓	✓	✓
Mendez Middle School	1,139	✓		✓
Murchison Middle School	1,038	✓	✓	✓
Bowie High School	2,378			✓
Lanier High School	1,256	✓	✓	✓
McCallum High School	1,199	✓		✓
Robbins Secondary School	361	✓	✓	✓
Alternative Learning Center	91	✓	✓	✓
TOTAL	**12,032**	**10**	**8**	**11**

Expenditures for secondary library technology support totaled $25,910. The Chapter 2 Formula cost per student was $2.15.

91.19

MIDDLE SCHOOL HOMEROOM TRAINING

None of the $3,379 allocated to Middle School Homeroom Training was spent during the 1991-92 school year.

During the 1990-91 school year, Chapter 2 Formula provided funds for the development of curricula to be used during the homeroom/advisory periods in grades six, seven, and eight. Two staff members were hired to expand the advisory/homeroom curricula from the 1989-90 school year. Supplemental activities were developed during the summer and fall of 1990 and were distributed to all middle and junior high schools during the 1990-91 school year. The activities were designed to promote the relationship between teacher and students as well as among students. The units included the following topics:

- Knowing Self and Others,
- Study Skills,
- Test-taking Skills,
- R-E-S-P-E-C-T (a cultural awareness unit),
- Conflict Resolution,
- Communication Skills: Listening and Responding,
- Black History/Awareness,
- Hispanic History/Awareness,
- Peer Pressure,
- Decision Making/Problem Solving, and
- Looking at the Future.

Additional copies of these units were reproduced during the 1991-92 school year. Reproduction fees were paid with funds from the Chapter 2 Formula management budget.

For the 1991-92 school year, Chapter 2 Formula funds were allocated for staff development in the use of these units. **This was not accomplished.** In February 1992, 40 middle school teachers attended the Texas Middle School Association Conference held in Austin, with the registration fees paid by each school and reimbursement for the fees to be paid by Chapter 2 Formula. However, there were no requests for reimbursement of these fees.

MULTICULTURAL/SPECIAL PURPOSE BUSES

A survey of the users of the multicultural/special purpose buses indicated that most of them thought the buses improved multicultural awareness (94%), increased parent involvement (70%), and had a positive impact in terms of dropout prevention (87%). Most of the trip sponsors (83%) said the activity for which they used the bus would not have been possible without the provision of the multicultural/special purpose buses.

SERVICES PROVIDED

Chapter 2 Formula allocated funds to provide bus transportation for students and parents to multicultural and community events, school-based activities, and special trips. Chapter 2 paid $9,489 for a total of 189 bus trips in 1991-92. Most trips were requested by elementary schools, with secondary schools only requesting nine. These trips were coordinated through the Office of School-Community Services.

At an estimated 50 students per bus, 9,450 students were served overall. The Chapter 2 Formula cost per student was $1.00.

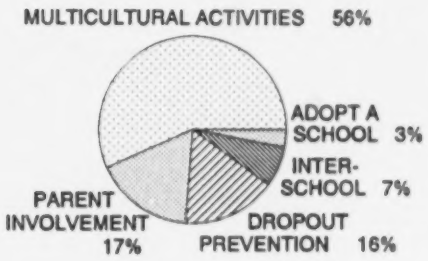
Some of the most frequently reported uses of this service were for trips to:

- Other schools (45): for interschool activities, multicultural activities, and school orientations,
- Reagan High School Theater (22),
- Paramount Theater (10),
- Givens Recreation Center (10),
- The University of Texas (6): Huntington Art Building and Performing Arts Center,
- State buildings (4): the Capitol Building, the LBJ Office Building, the Texas Department of Human Services office, and
- Zilker Park (3).

Other destinations included Oak Springs Library, Carver Museum, Burger Center, Austin Children's Museum, Aquarena Springs, United States Post Office, Institute of Texan Cultures in San Antonio, T-Bar-M Ranch in New Braunfels, Kim Phung Pho Restaurant, Texas Exposition and Heritage Center, Mexic-Arte Gallery, Four Seasons Hotel, McKinney Falls State Park, Texas Commerce Bank, and NationsBank (formerly NCNB).

According to trip sponsors who returned a user survey, the majority (56%) of the trips were for multicultural activities (see Figure 10). Parent involvement activities accounted for 17% of the trips, dropout prevention activities 16%, and interschool activities 7%. A small percentage (3%) were for visits to two schools' Adopt-A-School adopters.

FIGURE 10
TYPES OF TRIPS TAKEN ON MULTICULTURAL/SPECIAL PURPOSE BUSES, 1991-92



EFFECTIVENESS

A sample of elementary and secondary campus teachers, professionals, and administrators received two questions regarding the multicultural/special purpose transportation on the spring 1992 districtwide employee survey. Responses indicate that:

- Over a third (39%) of those familiar with the program (N = 366) agreed that the multicultural/special purpose buses were effective in increasing multicultural awareness; about half (49%) were neutral, and a small percentage (12%) disagreed.
- A third (35%) agreed that the service was effective in increasing parent involvement in students' education; half (52%) were neutral, and 13% disagreed.

The Office of Research and Evaluation administered a user survey through School-Community Services to all trip sponsors throughout the school year. A total of 190 surveys were sent out, and 65 were returned, for a return rate of 34%. Results of these surveys showed that:

- Almost all (95%) of the respondents agreed that parent and student involvement in special activities is facilitated by the transportation service; 2% were neutral, and 3% disagreed (N = 65).
- Most (94%) thought that the buses improved multicultural awareness; 3% were neutral, 2% disagreed, and 2% did not use the service for this purpose (N = 65).
- Over two thirds (70%) of the respondents agreed that the service increased parent involvement; 14% were neutral, 6% agreed, and 9% did not use the service for this purpose (N = 64).
- Most (87%) said that the buses provided have a positive impact in terms of dropout prevention; 11% were neutral, 2% disagreed, and 2% did not use the buses for this purpose (N = 65).

Trip sponsors were asked how important it was to have these buses provided for their school activities. Most of them (83%) said that this particular activity would not have been possible without the provision of the buses; a small percentage (14%) said that the activity may or may not have been possible without the provision of these buses. Only a few (3%) said that the activity could have occurred if the buses had not been provided.

PREKINDERGARTEN SUPPLEMENTS

During the 1991-92 school year, the Bracken Basic Concept Scale (BBCS) was administered for the first time to AISD prekindergarten students. Overall, AISD prekindergarten students showed losses from pre- to posttest on the BBCS. The Chapter 2 LEP students showed a small loss, while Chapter 2 low-income students showed a small gain. **Because of the questionable validity of the BBCS in measuring prekindergarten progress in AISD, scores should be interpreted with caution.**

DESCRIPTION

Full-day prekindergarten classes for low-achieving students have been federally funded in AISD since 1978-79. In 1985-86, Texas House Bill 72 mandated half-day prekindergarten classes for limited-English-proficient (LEP) and low-income students. At that time, Chapter 1 began to fund an additional half day to provide full-day programs at qualifying campuses. In 1987-88, Chapter 2 Formula also began to supplement half-day programs to full-day programs. During 1991-92, Chapter 2 Formula allocated $109,786 to provide an extra half day for seven classes on two campuses (two low-income classes and one bilingual class at Blanton Elementary, and two bilingual classes, one low-income class, and one English as a Second Language class at Travis Heights Elementary). A total of 122 students attended these prekindergarten classes, for a Chapter 2 Formula allocation of $899.89 per student. Of these students:

- 70% were Hispanic, 15% were African-American, and 15% were Other;
- 49% were female, and 51% were male; and
- 34% were LEP students, and 66% were non-LEP students.

Ethnicity, sex, and language dominance for prekindergarten students in each school are shown in Figures 11, 12, and 13.

FIGURE 11
ETHNICITY OF CHAPTER 2 PREKINDERGARTEN STUDENTS AT TRAVIS HEIGHTS (N = 71) AND BLANTON (N = 51), 1991-92

FIGURE 12
SEX OF CHAPTER 2 PREKINDERGARTEN STUDENTS
AT TRAVIS HEIGHTS (N = 71) AND BLANTON (N = 51), 1991-92

FIGURE 13
LANGUAGE DOMINANCE OF CHAPTER 2 PREKINDERGARTEN STUDENTS
AT TRAVIS HEIGHTS (N = 71) AND BLANTON (N = 51), 1991-92

DEFINITIONS:

LEP A students are monolingual in another language.
LEP B students are dominant in another language.
LEP D students are English dominant.
(There were no LEP C or E among the students served.)

EFFECTIVENESS

Bracken Basic Concept Scale (BBCS)

In order to measure whether or not students had made achievement gains, the BBCS was given to a large, random sample of prekindergarten students. The BBCS is an individually administered test that measures basic concept development. It was first used to test prekindergarten students in AISD during the 1991-92 school year.

Students were pretested in September 1991 and posttested in April 1992. The scores reported are standard scores based on nationally established norms for children of varying age levels. The national average is 100. Because the test is age normed, over a period of time the standard scores of students making average gains are expected to remain constant (students would make the same score on both the pre- and posttest).

In Figure 14, the average pretest, posttest, and gain for students who had valid scores on both administrations (61% of the AISD prekindergarten students and 69% of Chapter 2 Formula prekindergarten students) are presented.

FIGURE 14
BRACKEN BASIC CONCEPT SCALE 1991-92 STANDARD SCORES AND GAINS
FULL-DAY VERSUS HALF-DAY PREKINDERGARTEN CLASSES

FUNDING SOURCE	TYPE OF CLASS	N	PRETEST SCORE	POSTTEST SCORE	GAIN
Chapter 2 Formula	**LEP Full-Day**	**32**	**87.9**	**84.0**	**-3.9**
AISD	LEP Full-Day	241	89.3	83.7	-5.6
AISD	LEP Half-Day	122	89.7	87.4	-2.3
Chapter 2 Formula	**Low-Income Full-Day**	**52**	**88.5**	**90.8**	**+2.3**
AISD	Low-Income Full-Day	759	91.4	90.4	-1.0
AISD	Low-Income Half-Day	394	93.4	95.2	+1.8

Overall, AISD prekindergarten students showed losses from pre- to posttest. The AISD LEP and Chapter 2 Formula full-day LEP students had the greatest losses, while the AISD half-day low-income and Chapter 2 Formula full-day low-income students showed the highest gains.

Because of the questionable validity of the BBCS in measuring prekindergarten progress in AISD, these scores should be interpreted with caution. A discussion of the concerns pertaining to the use of the BBCS in AISD can be found in the 1991-92 Priority Schools final report (Office of Research and Evaluation Publication Number 91.04).

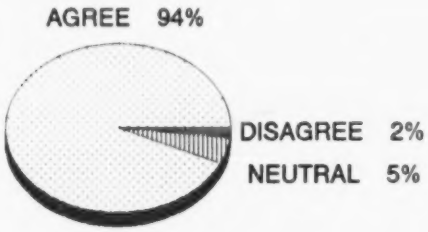
Districtwide Employee Survey

Prekindergarten teachers received four questions on the 1992 districtwide employee survey concerning the prekindergarten program.

Responses to the survey items indicate that:

- Most (94%) of the teachers responding (N = 123) agreed that full-day prekindergarten programs are more effective than half-day programs (see Figure 15). Few were neutral (5%) or disagreed (2%).
- Nearly all (92%) of the teachers surveyed (N = 125) were satisfied with the instructional support for prekindergarten provided by the central office, and over two thirds (69%) were satisfied with the instructional support provided by their local campus (N = 122).
- Most (85%) of the teachers responding (N = 124) were satisfied with the monthly prekindergarten staff development sessions.

FIGURE 15
PREKINDERGARTEN TEACHER RESPONSES (N = 123) TO SURVEY ITEM: "I THINK A FULL-DAY PREKINDERGARTEN PROGRAM IS MORE EFFECTIVE THAN A HALF-DAY PROGRAM."



Additional information concerning the AISD prekindergarten program can be found in the 1991-92 Priority Schools final report (Office of Research and Evaluation Publication Number 91.04).

PRIVATE SCHOOLS

Private schools rated highly the effectiveness of the equipment, hardware, software, instructional materials, and library resources purchased with Chapter 2 funds. Staff development funded by Chapter 2 Formula was rated moderately effective.

ELIGIBILITY AND PARTICIPATION

Chapter 2 Formula funds are available through Austin ISD to nonpublic, nonprofit schools within AISD boundaries. Nonpublic schools are contacted each spring to see if they want to participate during the upcoming school year. Applicants must meet a number of eligibility requirements relating to compliance with federal nondiscrimination laws and Texas Education Agency (TEA) administrative requirements. Funds are then allocated to approved applicants on a per-pupil basis for purchase of items approved by the TEA. All purchases are made through AISD, and the District retains title to, and exercises administrative control of, all equipment and supplies. The 13 schools receiving funds in 1991-92 are listed in Figure 16.

FIGURE 16
PRIVATE SCHOOLS RECEIVING CHAPTER 2 FUNDS, 1991-92

PRIVATE SCHOOL	GRADE SPAN	ENROLLMENT	EXPENDITURES
Austin Waldorf School	K-8	150	$1,371
Great Hills Christian School	K-12	250	1,927
Hope Lutheran School	EK-6	87	634
Kirby Hall	K-12	110	726
Redeemer Lutheran School	K-6	290	2,244
Sacred Heart School	EK-6	180	1,393
St. Austin's School	K-8	240	1,830
St. Ignatius School	EK-8	250	1,895
St. Louis School	EK-8	410	3,150
St. Mary's School	EK-6	200	1,503
St. Michael's School	9-12	215	1,550
St. Paul Lutheran School	EK-8	200	1,533
St. Theresa's School	EK-6	154	1,119
TOTAL		**2,766**	**$20,875**

The Chapter 2 Formula cost per student was $7.55.

UTILIZATION

Chapter 2 Formula funds were allocated to private schools in five categories. The types of expenditures included the following.

- Equipment/Hardware: computer printer, computer furniture, overhead projector, video cassette recorder.
- Software: typing skills software, geography software, miscellaneous software, video cassettes, Minnesota Educational Computer Consortium membership.
- Instructional Materials: science kits, math manipulatives, overhead calculator, posters, maps, musical instruments, compasses, art tools, radiometer, dictionaries, thesauruses, audio cassettes, subscription to Current Science.
- Library Resources: books, slides, maps, posters, encyclopedias.
- Staff Development: consultant to train staff in the use of an art curriculum.

EFFECTIVENESS

Private School Survey

To meet TEA reporting requirements, private school administrators were surveyed concerning the number of students impacted and the perceived effectiveness of the purchases made with Chapter 2 Formula funds. Completed forms were returned by 12 of the 13 schools, for a return rate of 92%. Results are shown in Figure 17.

FIGURE 17
EFFECTIVENESS OF PRIVATE SCHOOL EXPENDITURES, 1991-92

CATEGORY	NUMBER OF SCHOOLS USING	STUDENTS IMPACTED	EFFECTIVENESS (MEAN RATING)
Equipment/Hardware	3	720	4.3
Software	8	1,040*	4.2
Instructional Materials	10	1,486*	4.2
Library Resources	10	2,101*	4.6
Staff Development	2	433	3.3

* Includes an estimate of the number of students impacted at the school that did not return a survey. The estimate is based on the number of students listed in the grant application.

EFFECTIVENESS SCALE:

5 = EXTREMELY EFFECTIVE
4 = HIGHLY EFFECTIVE
3 = MODERATELY EFFECTIVE
2 = NOT VERY EFFECTIVE
1 = INEFFECTIVE

Effectiveness was rated highly for all categories except for staff development, which was rated moderately effective. Average ratings ranged from 3.3 to 4.6, with library resources receiving the highest rating of 4.6.

Measuring Effectiveness

Private school administrators were asked to report what methods were used to measure the effectiveness of the Chapter 2 Formula funds. Administrators responding to the survey (n = 12) reported using from one to five of the methods listed in Figure 18.

FIGURE 18
METHODS USED BY PRIVATE SCHOOLS TO MEASURE THE EFFECTIVENESS OF CHAPTER 2 FORMULA FUNDS, 1991-92

METHOD OF MEASURING EFFECTIVENESS	NUMBER AND PERCENT USING METHOD
Teacher survey	6 (50%)
Grade Point Average (GPA)	2 (17%)
Monitoring of use	5 (42%)
Student survey	2 (17%)
Teacher evaluation	4 (33%)
Test scores	4 (33%)
Principal's evaluation	1 (8%)

91.19

SPANISH ACADEMY

The majority (70%) of the Spanish Academy participants surveyed considered the course excellent. Over half (59%) of all AISD employees surveyed believed that the Spanish Academy is beneficial in assisting AISD staff in communications in Spanish with parents and students.

DESCRIPTION

The Spanish Academy offers courses in conversational Spanish to AISD employees through a continuing program designed to develop the language and foster an appreciation and understanding of Hispanic culture. The main goal is to improve the ability of staff to deal with students and parents who are Spanish speakers. Beginning, intermediate, and advanced classes are provided. Translation classes are also available when enrollment is sufficient. During the school year, classes are held Monday through Thursday. Summer classes are held throughout the week during the day and early evening. Classes meet for two hours once per week during the school year and twice per week during the four-week summer session (held in June).

Elementary teachers are eligible for Advanced Academic Training (AAT) credit for participating in the classes. All secondary-level teachers with at least one Hispanic limited-English-proficient student enrolled in their classes are also eligible to receive AAT credit. A total of 16 class hours is required to receive AAT credit.

During the 1991 summer session, two part-time instructors taught a total of eight beginning, preintermediate, intermediate, and advanced classes. In fall 1991, the two instructors taught a total of 10 beginning, preintermediate, intermediate, and advanced classes. During the spring 1992 semester three instructors taught a total of nine beginning, intermediate, and advanced classes.

Consultants were hired to provide activities related to Hispanic culture. During the fall 1991 semester the three consultants hired made the following presentations:

- Slide presentation on Mexican and Mexican American art and murals,
- Talk and demonstration on Latin American music, and
- Discussion of the psychology of the Hispanic family.

During the spring 1992 semester, three consultants were hired to teach cooking classes. Participants were also encouraged to attend activities outside of the classroom. These activities, entitled Días Culturales, included the following:

- Free Spanish movies provided by Brooke Community School,
- Visits to several local Mexican food restaurants and clubs, and
- Local functions and activities related to the Hispanic culture.

RESTRUCTURING

The administration of the Spanish Academy was turned over to the Office of Community Education for the spring 1992 semester. The program was restructured by hiring a Program Coordinator (Head Instructor) who continued to carry out the program. Instructors were hired on an hourly basis. All other budgetary procedures, registration procedures, and program objectives remained the same.

ENROLLMENT OF AISD PERSONNEL

The number of classes provided and the number of staff enrolling in 1991-92 is shown below in Figure 19. Total enrollment this year (213) was lower than in 1990-91 (364). The Chapter 2 Formula allocation of $38,774 amounted to $182.04 per staff member enrolled.

FIGURE 19
SPANISH ACADEMY ENROLLMENT, 1991-92

SEMESTER	NUMBER OF CLASSES	ENROLLMENT*
Summer 1991	8	58
Fall 1991	10	85
Spring 1992	9	70
1991-92 Total	**27**	**213**

*Includes students who attended one or more class.

Spanish Academy participants represented 27 different positions overall, with teachers most common. Other positions represented included principal, instructional coordinator, teacher assistant, librarian, parent training specialist, secretary, clerk, custodian, bus driver, computer lab technician, nurse, food services worker, vision and hearing screener, speech pathologist, art therapist, attendance officer, special education aide, campus police officer, occupational therapist, and physical therapist.

SUMMER 1992 SESSION

A total of six classes (three beginning, two intermediate, and one advanced) were scheduled for the summer 1992 session. As of June 4, 1992, 60 staff members were enrolled.

91.19

EFFECTIVENESS

Effectiveness was measured by a course evaluation and the districtwide employee survey. The course evaluation was distributed to participants enrolled in the fall 1991 course or the spring 1992 course who attended three or more classes.

Course Evaluation

A total of 44 evaluation forms were returned for both semesters. During the fall 1991 semester, 24 forms were returned, and during the spring 1992 semester, 20 forms were returned.

Responses were generally quite positive and indicated the following:

- A majority of the fall participants (63%) and the spring participants (79%) considered the course excellent, with 33% of the fall participants and 21% of the spring participants rating it good, and 4% of the fall participants rating it adequate. None of the spring participants rated it below good (see Figure 20).

- Nearly all of the fall participants (96%) and spring participants (95%) believed the course helped them in their jobs, but a higher percentage of the fall participants reported that the course helped them a lot with their jobs (see Figure 21). Of these respondents, 63% of the fall participants and 42% of the spring participants indicated it helped a lot, and 33% of the fall participants and 53% of the spring participants indicated it helped some. Only a few (4-5%) reported that the course did not help them at all.

- All of the fall participants (100%) and spring participants (100%) indicated that they would continue to take Spanish Academy classes.

FIGURE 20
SPANISH ACADEMY, 1991-92
PARTICIPANTS' RATING OF COURSE

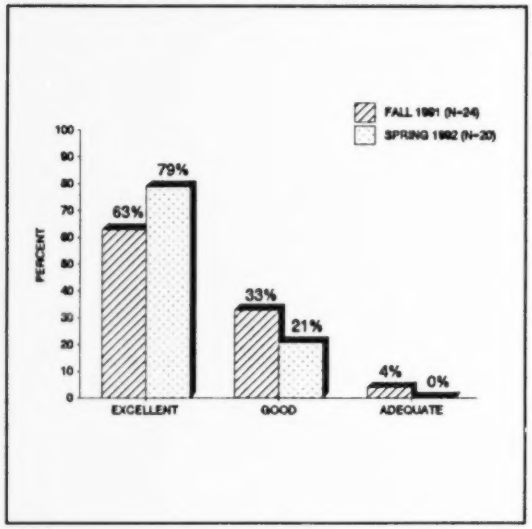
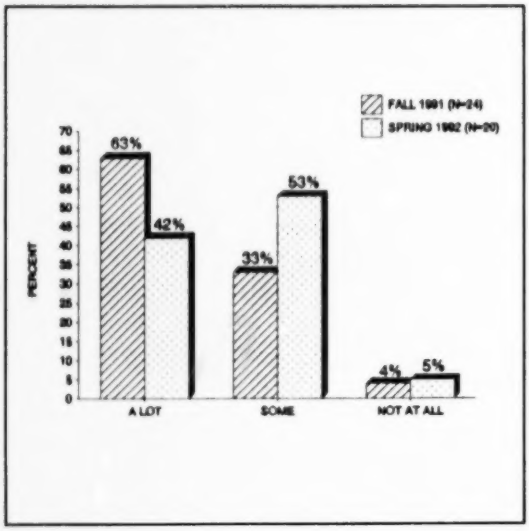


FIGURE 21
SPANISH ACADEMY, 1991-92
PARTICIPANTS' RESPONSE TO SURVEY ITEM: "HAS THIS COURSE HELPED YOU IN YOUR JOB?"



Districtwide Employee Survey

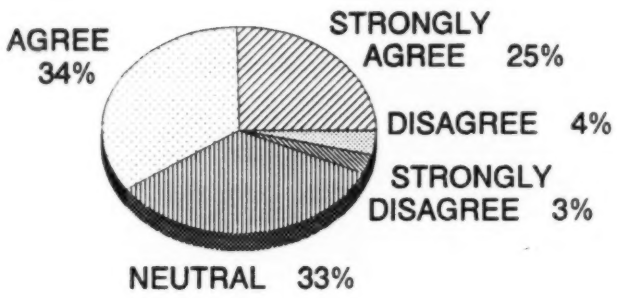
A broader sample of administrators, teachers, and professionals received three items concerning the Spanish Academy on the districtwide employee survey. Their responses indicated the following:

- Over half (59%) of the respondents familiar with the program (N = 347) believed that the Spanish Academy was beneficial in assisting AISD staff in communications in Spanish with parents and students, while a third (33%) were neutral concerning the benefits of the course (see Figure 22). A quarter (25%) of the persons receiving this survey item (N = 450) were unfamiliar with the program.

- About three quarters (76%) of the administrators (N = 54), over half (56%) of the teachers (N = 320), and about half (49%) of the professionals (N = 61) saw a notice about Spanish Academy classes for the spring 1992 semester.

- More than half (55%) of the respondents familiar with the program (N = 379) reported that the Spanish Academy fliers and other notices were adequate advertising for the classes.

FIGURE 22
RESPONSES TO EMPLOYEE SURVEY ITEM (N = 347):
"I BELIEVE THAT THE SPANISH ACADEMY IS BENEFICIAL IN ASSISTING AISD STAFF IN COMMUNICATIONS IN SPANISH WITH PARENTS AND STUDENTS."



91.19

SUPPORT FOR RESTRUCTURING ROBBINS

W. R. Robbins Secondary School, an alternative high school, restructured its program in 1991-92 to provide a continuous progress program for at-risk students. This process included the revision and rewriting of Robbins' curriculum. Chapter 2 funds were used to reproduce the curriculum packets and purchase general supplies.

UTILIZATION OF FUNDS

Chapter 2 allocated $7,000 for supplemental support for the restructuring of W. R. Robbins Secondary School. Of this amount, $2,000 was allocated for the reproduction of revised curriculum and $5,000 was allocated for general supplies to supplement the curriculum development. The funds were spent for the following:

- Reproduction of curriculum packets,
- Purchase of "Street Law," a course in practical law,
- Purchase of magazine files, and
- Purchase of 13 copies of "Careers in Home Economics" and the teacher's resource binder.

The total cost of the reproduction of the curriculum and the purchase of the supplies was $6,933. The Chapter 2 Formula cost per student was $19.20.

EFFECTIVENESS

The principal at Robbins was asked to rate the effectiveness of the use of the Chapter 2 Formula funds. She agreed that the reproduction funded by Chapter 2 Formula was useful in the restructuring of Robbins, and reported that the restructuring of the Robbins curriculum could not have been done without these funds.

TECHNOLOGY LEARNING CENTER

During the 1991-92 school year, the Technology Learning Center (TLC) at Johnston High School was restructured to provide a computer lab for enrichment activities for all students at the school. The majority of teachers at Johnston surveyed agreed that the TLC contributed to the academic performance of high-risk students and reduced the likelihood of their dropping out. Over half of the teachers surveyed reported that the TLC resources were available to anyone at the school, and that the TLC staff helped with computer-related items. However, a fifth of the teachers at Johnston surveyed were unfamiliar with the program.

PROGRAM DESCRIPTION

The Technology Learning Center (TLC) at Johnston High School was restructured during the 1991-92 school year. Previously, the focus of the center, known then as the Comprehensive Competencies Program (CCP) lab, was on keeping at-risk, older students (17-20 years old) in class. During the 1991-92 school year, the TLC was restructured to focus on the needs of all students at Johnston High School by providing a computer ~~lab~~ for enrichment activities.

STAFFING

Chapter 2 Formula funds provided the salary for the TLC teacher and the management information specialist through an allocation of $56,838 (a per-student allocation of $36.62). During the fall 1991 semester, the teacher taught two Pre-Algebra/Algebra classes (each two periods long) and a Trigonometry class. During the spring 1992 semester, the teacher taught a Trigonometry/Analysis class (which included some potential dropouts) and three Zenith Program classes. The Zenith Program provides an alternative diploma program for students 17-21 years of age. The duties of the Management Information Specialist were to:

- Maintain the computer hardware and software in the TLC;
- Operate the computer network;
- Assist with student tutoring;
- Handle technical problems involving computer hardware and software throughout the Johnston campus; and
- Assist staff with hardware and software evaluation and research.

STUDENTS SERVED

The TLC lab could be used by any class at Johnston, but preference was given to Renaissance classes, which targeted freshmen at-risk students. Teachers could preview the software available in the TLC library of software, and then schedule a time to take their classes to the lab for enrichment activities. Some classes came on a regular basis, while others came only when the teachers reserved time in the TLC. The Management Information Specialist (MIS) was responsible for scheduling classes into the TLC. The length of time classes spent in the TLC varied from one-half to three hours.

EFFECTIVENESS

Districtwide Staff Survey

Johnston teachers and administrators received several items regarding the TLC on the 1991-92 districtwide employee survey.

- When asked if the TLC contributed to the academic performance of high-risk students, 65% of the teachers familiar with the program (N = 74) agreed, 27% were neutral, and 8% disagreed. The one administrator surveyed agreed. A fifth (20%) of the teachers surveyed (N = 92) were unfamiliar with the program.

- When asked if the TLC is reducing the likelihood that high-risk students using the center will drop out, 64% of the teachers familiar with the program (N = 73) agreed, 27% were neutral, and 8% disagreed. Again, the one administrator surveyed agreed with this statement.

- Of the teachers familiar with the program (N = 73), 61% agreed that the TLC resources were available to anyone at the school who would like to use them. While over a quarter (30%) of the teachers responding were neutral, a few (9%) disagreed with this statement.

- Over half (54%) of the teachers familiar with the TLC (N = 74) agreed that the TLC staff helped with any computer-related items. Only 5% disagreed, but 41% were neutral to this statement.

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USING TECHNOLOGY FOR ACCESS TO PROBLEM SOLVING

AISD only received about 45% of its allocation of calculators from the Texas Education Agency. The other 55% is expected to arrive during the fall of 1992.

PROGRAM DESCRIPTION

During the 1991-92 school year, the Austin Independent School District applied to the Texas Education Agency (TEA) to participate in a Chapter 2 Discretionary project called Using Technology for Access to Problem Solving. This project was designed to provide Texas Instruments Math Explorer (TI 12) calculators for use by students in eighth grade. No actual funds were received; calculators were provided through TEA.

STUDENTS SERVED

Every middle school and junior high received calculators. These schools included:

Bedichek	Dobie	Lamar	Murchison	Porter
Burnet	Fulmore	Martin	O. Henry	
Covington	Kealing	Mendez	Pearce	

In the initial allotment, the middle schools each received 110 calculators, W. R. Robbins Secondary School received 11, the Alternative Learning Center (ALC) received 72, private schools received a total of 223, and the Mathematics/Computers instructional coordinator received 54, for a total of 1,790 calculators. Because of a change in the distribution plan, AISD only received about 45% of its allocation of calculators during the 1991-92 school year. The other 55% are expected to arrive during the fall of 1992.

Calculators are to be maintained by AISD and checked out to students in the same manner that textbooks are distributed, so that they will be available to students at all times (school settings, home settings, tutorials). However, since AISD did not receive a calculator for each 8th grade student, class sets will be used until all calculators arrive.

STAFF TRAINING

All mathematics teachers have had the opportunity to be trained in the use of TI 12 (Explorer), TI 34, and TI 81 calculators. For middle school mathematics teachers, AISD has had the specific training sessions which are listed in Figure 23. The 1989 session was an overall orientation, while the 1990 and 1991 sessions involved a general familiarization with the Explorer and how it may be used to solve problems. Calculator workshops will be available during the summer of 1992 for those teachers needing training.

FIGURE 23
CALCULATOR STAFF DEVELOPMENT OFFERED IN AISD

DATE OF SESSION	LENGTH OF SESSION	NUMBER OF TEACHERS
August 15, 1989	6 hours	35
June 12, 1990	6 hours	29
June 13, 1990	6 hours	38
June 4, 1991	6 hours	27
June 5, 1991	6 hours	29

PARENT/COMMUNITY AWARENESS ACTIVITIES

In order to participate in this program, AISD agreed to establish a plan to conduct the required parent/community awareness activities on appropriate uses of calculators in mathematics classrooms. The Texas Education Agency was to provide a video tape and accompanying materials to use with community and parent groups, but as of May 1992 these tapes had not been received. In January 1992, several AISD staff members previewed the tape developed by Southwest Texas State University and Texas A&M University. A pilot class for parents was conducted at Bedichek Middle School in January 1992. Individual parents were interviewed by personnel from Southwest Texas State University. These parents and staff made recommendations for revisions. When the revised tapes are received, training will be provided to the mathematics chairs, and they will present the video tape to interested parents at special meetings in the fall of 1992.

EFFECTIVENESS

A sample of middle school/junior high teachers received one question on the districtwide employee survey addressing the effectiveness of staff development in the use of calculators for problem solving.

Responses to the survey item indicate that:

- Of those receiving training (N = 102), two thirds (67%) were neutral about the effectiveness of the training.
- A quarter (26%) of the teachers receiving training agreed that the training was effective. Few (8%) of those responding disagreed.

Additional information concerning calculator staff development can be found in the 1990-91 ESEA Title II Evaluation Report, Improving Mathematics and Science Teaching (Office of Research and Evaluation Publication Number 90.46).

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